



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,262	07/18/2003	Frederick S. M. Herz	REFH-0155	3489

7590  
Frederick S. M. Herz  
P O Box 67  
Warrington, PA 18976

06/08/2009

EXAMINER
----------

WHIPPLE, BRIAN P

ART UNIT	PAPER NUMBER
----------	--------------

2452

MAIL DATE	DELIVERY MODE
-----------	---------------

06/08/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/623,262

Applicant(s)

HERZ ET AL.

Examiner

BRIAN P. WHIPPLE

Art Unit

2452

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-6 are pending in this application and presented for examination.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/21/09 has been entered.

#### ***Response to Arguments***

3. Applicant's arguments filed 5/21/09 have been fully considered but they are not persuasive.
4. As to claim 1, Applicant argues Smirnov is silent on registering user types. However, Ho discloses registering user types (Col. 3, ln. 4-13; Col. 4, ln. 9-11). For example, the type of user is a doctor who is authorized to view the records of a particular patient (such as the patient's current primary provider).
5. Further regarding claim 1, Applicant argues (see page 6, lines 1-3) Ho fails to disclose a service provider identifier. The Examiner respectfully disagrees. Ho clearly outlines a subject ID (Col. 3, ln. 4-13, "last name, ... patent identification number, inmate identification number,

account number...”) and that the user accessing information on the subject through the subject ID can be a service provider such as a “a doctor, a lawyer, ... banker” (Col. 2, ln. 49-56). Therefore, Ho is directed to a service provider (such as a doctor) accessing data records through the use of a subject ID that relates the identified subject to the service provider (e.g., a patient's medical records may be accessed by a doctor).

6. Further regarding claim 1, Applicant argues Kesarwani is silent on “allowing the person to view stored private data or pseudonyms of the private data.” The Examiner respectfully disagrees. Kesarwani discloses validating the person’s relationship (i.e., remote user) to the service provider (i.e., company) so that access may be provided to private data (e.g., the main office’s computer resources) (Col. 6, ln. 29-38).

7. Further regarding claim 1, Applicant argues the service provider identifier cannot be provided with a random factor, because no service provider identifier is taught. However, the Examiner has refuted this allegation above.

### ***Claim Objections***

8. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smirnov et al. (Smirnov), U.S. Publication No. 2003/0097383 A1, in view of Ho, U.S. Patent No. 6,148,342, in view of Kesarwani et al. (Kesarwani), U.S. Patent No. 7,213,258 B1, and further in view of Nordman et al. (Nordman), U.S. Publication No. 2002/0174364 A1.

11. As to claim 1, Smirnov discloses a method (the body of the claim does not rely upon the preamble and therefore, the preamble has not been given patentable weight) comprising:

persons having private data for storage ([0152], ln. 1-2 and 6-10; [0351], ln. 1-2);  
registering the persons with a pseudonymous proxy server as a user type with associated pseudonyms for each user and pseudonyms for the respective person's stored private data ([0128]; [0132]); and

the pseudonymous proxy server providing each person's associated pseudonym ([0128]; [0132]).

Smirnov is silent on assigning respective unique identifications (UIDs) to the persons;  
sets of rules that control access to the respective person's stored private data by persons registered with the pseudonymous proxy server based at least on user type;

providing service provider identifiers to each person that identifies the respective persons to a service provider;

the pseudonymous proxy server providing each person's service provider identifier with a random factor;

transmitting a message from one of the persons to the service provider through the server, wherein the server receives the message and, based on the set of rules that control said one person's access to the stored private data of a person, validates a relationship between said one person and the service provider and transmits the message to the service provider if the relationship between said one person and the service provider is validated; and

said server authorizing said one person to view the stored private data of said person based on said set of rules that control said one person's access to said stored private data of said person.

However, Ho discloses assigning respective unique identifications (UIDs) to persons (Col. 3, ln. 4-13; Col. 3, ln. 63 – Col. 4, ln. 2);

persons registered with the server based at least on user type (Col. 3, ln. 4-13; Col. 4, ln. 9-11); and

providing service provider identifiers to each person that identifies the respective persons to a service provider (Col. 3, ln. 4-13).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Smirnov by assigning a unique identification (UID) to a person as taught by Ho in order to uniquely identify individual persons, such as patients, in order to obtain the proper data, such as medical records for a specific patient.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Smirnov by providing a service provider identifier to the person that identifies the person to a service provider in order to enable a service provider to obtain information on a relevant subject.

Smirnov and Ho are silent on sets of rules that control access to the respective person's stored private data;

the pseudonymous proxy server providing each person's service provider identifier with a random factor;

transmitting a message from one of the persons to the service provider through the server, wherein the server receives the message and, based on the set of rules that control said one person's access to the stored private data of a person, validates a relationship between said one person and the service provider and transmits the message to the service provider if the relationship between said one person and the service provider is validated; and

said server authorizing said one person to view the stored private data of said person based on said set of rules that control said one person's access to said stored private data of said person.

However, Kesarwani discloses sets of rules that control access to the respective person's stored private data (Col. 4, ln. 51-54 and 59-67; Col. 6, ln. 29-38);

transmitting a message from one of the persons to the service provider through the server (Fig. 3; Col. 6, ln. 29-38), wherein the server receives the message and, based on the set of rules that control said one person's access to the stored private data of a person, validates a relationship between said one person and the service provider and transmits the message to the

service provider if the relationship between said one person and the service provider is validated (Fig. 3; Col. 6, ln. 29-38); and

said server authorizing said one person to view the stored private data of said person based on said set of rules that control said one person's access to said stored private data of said person (Fig. 3; Col. 6, ln. 29-38)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Smirnov and Ho by including a set of rules that control a person's access to stored data and validating relationships between a person and a service provider based on the access rules in order to determine if access should be provided to private data of another user as taught by Kesarwani in order to prevent unauthorized access to data, such as information related to a person or persons other than the user accessing a database.

Smirnov, Ho, and Kesarwani are silent on the pseudonymous proxy server providing each person's service provider identifier with a random factor.

However, Nordman discloses a pseudonymous proxy server providing a service provider identifier with a random factor ([0013], ln. 2-6; [0094]).

Applying a random factor to the generated pseudonym is a logical extension of Smirnov, Ho, and Kesarwani. The intention of a pseudonym is to increase the privacy of a user. Therefore, assigning a pseudonym in a static or predictable manner would lessen the effectiveness of the pseudonym's intended use. Therefore, randomly assigning the pseudonym would increase the likelihood that a user's privacy is protected, as it would be more difficult to relate the pseudonym to the user absent a predictable assignment technique.



It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Smirnov, Ho, and Kesarwani by having the pseudonymous proxy server provide the service provider identifier with a random factor as taught by Nordman in order to gain the above-mentioned benefits.

12. As to claim 5, Smirnov, Ho, Kesarwani, and Nordman disclose the invention substantially as in parent claim 1, wherein the pseudonymous private data for a person registered with the pseudonymous proxy server is the person's medical records (Smirnov: [0152]) and said two or more data storage servers are controlled by respective medical service providers (Ho: Fig. 3C; Col. 2, ln. 57 – Col. 3, ln. 4; Col. 7, ln. 46-63), where said person and said respective medical service providers are permitted access to said person's medical records based on said set of rules (Kesarwani: Fig 3; Col. 4, ln. 51-54 and 59-67; Col. 6, ln. 29-38), and wherein a transfer of said patient's medical records from one medical service provider to another medical service provider includes the replacing of the another medical service provider's name with a pseudonym (Ho: Abstract; Kesarwani: Fig 3; Col. 4, ln. 51-54 and 59-67; Col. 6, ln. 29-38), pseudonymizing the person's medical records in accordance with the another medical service provider's access rights (Smirnov: [0128]; [0132]; [0152]; Ho: Col. 2, ln. 57 – Col. 3, ln. 13; Kesarwani: Fig 3; Col. 4, ln. 51-54 and 59-67; Col. 6, ln. 29-38), and providing the access rights to the another medical service provider based on authorization to the person's medical records as granted by the person (Smirnov: [0128]; [0132]; [0152]; Ho: Col. 2, ln. 57 – Col. 3, ln. 13; Kesarwani: Fig 3; Col. 4, ln. 51-54 and 59-67; Col. 6, ln. 29-38).

13. As to claim 6, the claim is rejected for reasons similar to claim 1 above.

14. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smirnov, Ho, Kesarwani, and Nordman as applied to claim 1 above, and further in view of what was well known in the art at the time of the invention.

15. As to claim 2, Smirnov, Ho, Kesarwani, and Nordman disclose the invention substantially as in parent claim 1, wherein the pseudonymous proxy server controls unique identifications (UIDs) (Ho: Col. 3, ln. 4-13) and sets of rules for respective persons among multiple servers (Kesarwani: Col. 4, ln. 51-54 and 59-67; Col. 6, ln. 29-38).

Smirnov, Ho, Kesarwani, and Nordman are silent on a hub and spoke network configuration.

However, Official Notice is taken (see MPEP 2144.03) that a hub and spoke network topology is extremely well known in the art. Hub and spoke networks are a desirable alternative to ring networks in that network failure is reduced through decentralizing whereas in a ring network a single point of failure could bring down a network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Smirnov, Ho, Kesarwani, and Nordman by using a hub and spoke network configuration as is extremely well known in the art in order to reduce the likelihood of network failure.

16. As to claim 3, the claim is rejected for the same reasons as claim 2 above.

17. As to claim 4, Smirnov, Ho, Kesarwani, and Nordman disclose the invention substantially as in parent claim 1, but are silent on the person encryption said pseudonym.

However, Official Notice is taken (see MPEP 2144.03) that encryption is extremely well known in the art. Encryption adds an extra layer of security, which is all the more important in teachings geared toward pseudonyms to protect data, such as in Smirnov, Ho, Kesarwani, and Nordman.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Smirnov, Ho, Kesarwani, and Nordman by having a person encrypt a pseudonym as is extremely well known in the art in order to add an extra layer of security to the protected data.

### ***Conclusion***

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN P. WHIPPLE whose telephone number is (571)270-1244. The examiner can normally be reached on Mon-Fri (9:30 AM to 6:00 PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2452

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian P. Whipple

/B. P. W./

Examiner, Art Unit 2452

6/3/09

/Dohm Chankong/

Primary Examiner, Art Unit 2452